**HTML Basic Examples**

Don't worry if these examples use tags you have not learned.

You will learn about them in the next units.

**HTML Documents**

All HTML documents must start with a document type declaration: **<!DOCTYPE html>**.

The HTML document itself begins with **<html>** and ends with **</html>**.

The visible part of the HTML document is between **<body>** and **</body>**.

**Example**

<!DOCTYPE html>  
<html>  
<body>  
 <h1>My First Heading</h1>  
 <p>My first paragraph.</p>  
</body>  
</html>

**HTML Headings**

HTML headings are defined with the **<h1>** to **<h6>** tags.

<h1> defines the most important heading. <h6> defines the least important heading:

**Example**

<h1>This is heading 1</h1>  
<h2>This is heading 2</h2>  
<h3>This is heading 3</h3>

**Lab 1**

1. **Type the following**

<!DOCTYPE html>

<html>

<body>

<h1>This is heading 1</h1>

<h2>This is heading 2</h2>

<h3>This is heading 3</h3>

<h4>This is heading 4</h4>

<h5>This is heading 5</h5>

<h6>This is heading 6</h6>

</body>

</html>

1. **Save and View**

**Questions**

1. **What did the <h#> tag do to the text appearance?**
2. **Which tag would give you a bigger and bolder text? <h1> or <h6>**
3. **Is there a tag <h8>? Try it.**

**HTML Paragraphs**

HTML paragraphs are defined with the **<p>** tag:

**Example**

<p>This is a paragraph.</p>  
<p>This is another paragraph.</p>

**Lab 2**

1. **Type the following**

<!DOCTYPE html>

<html>

<body>

<p>This is a paragraph.</p>

<p>This is a paragraph.</p>

<p>This is a paragraph.</p>

</body>

</html>

1. **Save and View**
2. **Try it without the <p> tags and view**

**Questions:**

1. **How did the appearance change by using the tag <p>?**

**HTML Links**

HTML links are defined with the **<a>** tag: Also known as the **Anchor** tag.

**Example**

<a href="http://www.espn.com">This is a link</a>

**Lab 3**

1. **Type the following and Save and View**

<!DOCTYPE html>

<html>

<body>

<a href="http://www.wjhsd.net">This is a link</a>

</body>

</html>

The link's destination is specified in the **href attribute**.

Attributes are used to provide additional information about HTML elements.

**HTML Images**

HTML images are defined with the **<img>** tag.

The source file (src), alternative text (alt), width, and height are provided as attributes:

Example

<img src="tree.jpg" alt="Picture of Tree" width="104" height="142">

**Lab 4**

1. **Save a .jpeg image to your h drive. Save image as smile.jpg**
2. **Type the following save and view**

<!DOCTYPE html>

<html>

<body>

<img src="smile.jpg" alt="picture of Smile" width="104" height="142">

</body>

</html>

**Questions:**

1. **What does src stand for?**
2. **What is the purpose of the attribute alt?**
3. **What is the purpose of attributes width and height?**

**HTML Elements**

An HTML element usually consists of a **start** tag and **end** tag, with the content inserted in between:

<tagname>Content goes here...</tagname>

The HTML **element** is everything from the start tag to the end tag:

<p>My first paragraph.</p>

|  |  |  |
| --- | --- | --- |
| **Start tag** | **Element content** | **End tag** |
| <h1> | My First Heading | </h1> |
| <p> | My first paragraph. | </p> |
| <br> |  |  |

**HTML elements with no content are called empty elements. Empty elements do not have an end tag, such as the <br> element (which indicates a line break).**

**Nested HTML Elements**

HTML elements can be nested (elements can contain elements). All HTML documents consist of nested HTML elements.

**The Golden Rule for nested tags**: **Last tag open is the first tag closed**

This example contains six HTML elements:

**Example**

<!DOCTYPE html>  
<html>

<head><title>Practice</title></head>  
<body>  
 <h1>My First Heading</h1>  
 <p>My first paragraph.</p>  
</body>  
</html>

Notice: The title tag is nested in the head tag. The head, body tags are nested in the html tag. Tags h1 & p are nested in the body tag.

**Example Explained**

The **<html>** element defines the **whole document**.

It has a **start** tag <html> and an **end** tag </html>.

The element **content** is another HTML element (the <body> element).

<html>  
<body>  
 <h1>My First Heading</h1>  
 <p>My first paragraph.</p>  
</body>  
</html>

The **<body>** element defines the **document body**.

It has a **start** tag <body> and an **end** tag </body>.

The element **content** is two other HTML elements (<h1> and <p>).

<body>  
 <h1>My First Heading</h1>  
 <p>My first paragraph.</p>  
</body>

The **<h1>** element defines a **heading**.

It has a **start** tag <h1> and an **end** tag </h1>.

The element **content** is: My First Heading.

<h1>My First Heading</h1>

The **<p>** element defines a **paragraph**.

It has a **start** tag <p> and an **end** tag </p>.

The element **content** is: My first paragraph.

<p>My first paragraph.</p>

Do Not Forget the End Tag

Some HTML elements will display correctly, even if you forget the end tag:

**Example**

<html>  
<body>  
 <p>This is a paragraph  
 <p>This is a paragraph  
</body>  
</html>

The example above works in all browsers, because the closing tag is considered optional.

**Never rely on this. It might produce unexpected results and/or errors if you forget the end tag.**

**Empty HTML Elements**

HTML elements with no content are called empty elements.

<br> is an empty element without a closing tag (the <br> tag defines a line break).

Empty elements can be "closed" in the opening tag like this: **<br />.**

HTML5 does not require empty elements to be closed. But if you want stricter validation, or if you need to make your document readable by XML parsers, you must close all HTML elements properly.

**Use Lowercase Tags**

HTML tags are not case sensitive: <P> means the same as <p>.

The HTML5 standard does not require lowercase tags, but I **recommend** you use lowercase in HTML, and **demands** lowercase for stricter document types like XHTML.

**Lab 5**

1. **Type the following**

<!DOCTYPE html>  
<html>  
<body>  
 The dog

barks

at the

moon.

<br/>

The dog <br/>

Barks <br/>

at the <br/>

moon.<br/>  
</body>  
</html>

1. **Save and View**

**Questions**

1. **What did the tag <br/> do?**
2. **Do you need the slash with the tag <br/>? Try using the tag <br> without the slash.**

**HTML Attribute**

Attributes provide additional information about HTML elements.

**HTML Attributes**

* All HTML elements can have **attributes**
* Attributes provide **additional information** about an element
* Attributes are always specified in **the start tag**
* Attributes usually come in name/value pairs like: **name="value"**

**The lang Attribute**

The language of the document can be declared in the **<html>** tag.

The language is declared with the **lang** attribute.

Declaring a language is important for accessibility applications (screen readers) and search engines:

<!DOCTYPE html>  
<html lang="en-US">  
<body>  
...  
</body>  
</html>

The first two letters specify the language (en). If there is a dialect, use two more letters (US).

**The title Attribute**

Here, a **title** attribute is added to the **<p>** element. The value of the title attribute will be displayed as a tooltip when you **mouse over** the paragraph:

**Example**

<p title="I'm a tooltip">  
This is a paragraph.  
</p>

**LAB 6**

1. **Type the following Save and View**

<!DOCTYPE html>

<html>

<body>

<h2>The title attribute</h2>

<p title="I'm a tooltip">

Mouse over this paragraph, to display the title attribute as a tooltip.

</p>

</body>

</html>

1. **Mouse Over the paragraph**

**The href Attribute**

HTML links are defined with the **<a>** tag. The link address is specified in the **href** attribute:

**Example**

<a href="http://www.wjhsd.net">This is a link</a>

You will learn more about links and the <a> tag later.

**Size Attributes**

HTML images are defined with the **<img>** tag.

The filename of the source (**src**), and the size of the image (**width** and **height**) are all provided as **attributes**:

Example

<img src="Smile.jpg" width="104" height="142">

The image size is specified in pixels: width="104" means 104 screen pixels wide.

You will learn more about images and the <img> tag later in this tutorial.

**The alt Attribute**

The **alt** attribute specifies an alternative text to be used, when an image cannot be displayed.

The value of the attribute can be read by screen readers. This way, someone "listening" to the webpage, e.g. a blind person, can "hear" the element.

Example

<img src="Smile.jpg" alt="picture" width="104" height="142">

We Suggest: Use Lowercase Attributes The HTML5 standard does not require lowercase attribute names.

The title attribute can be written with uppercase or lowercase like **Title** and/or **TITLE**.

I  **recommends** lowercase in HTML, and **demands** lowercase for stricter document types like XHTML

We Suggest: Quote Attribute Values

The HTML5 standard does not require quotes around attribute values. The **href** attribute, demonstrated above, can be written as:

**Example**

<a href=http://www.wjhsd.net>

I highly **recommend** quotes in HTML, and **demands** quotes for stricter document types like XHTML.

Sometimes it is **necessary** to use quotes. This example will not display the title attribute correctly, because it contains a space:

Example

<p title=About topic>

Using quotes are the most common. Omitting quotes can produce errors.

**Single or Double Quotes?**

Double quotes around attribute values are the most common in HTML, but single quotes can also be used.

In some situations, when the attribute value itself contains double quotes, it is necessary to use single quotes:

<p title='John "ShotGun" Nelson'>

Or vice versa:

<p title="John 'ShotGun' Nelson">

**Chapter Summary**

* All HTML elements can have **attributes**
* The **title** attribute provides additional "tool-tip" information
* The **href** attribute provides address information for links
* The **width** and **height** attributes provide size information for images
* The **alt** attribute provides text for screen readers
* Always use **lowercase** attribute names
* Always **quote** attribute values with double quotes

**HTML Attributes**

Below is an alphabetical list of some attributes often used in HTML:

|  |  |
| --- | --- |
| **Attribute** | **Description** |
| alt | Specifies an alternative text for an image, when the image cannot be displayed |
| disabled | Specifies that an input element should be disabled |
| href | Specifies the URL (web address) for a link |
| id | Specifies a unique id for an element |
| src | Specifies the URL (web address) for an image |
| style | Specifies an inline CSS style for an element |
| title | Specifies extra information about an element (displayed as a tool tip) |

**Questions**

1. **What is the Golden Rule for nested tags?**
2. **What is the purpose of attributes in tags?**
3. **Is there a difference between tag <br> and <br/>?**
4. **Why should you use lowercase when creating tags?**
5. **Why should you use double quotes for attributes values?**